

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1.-19. (canceled)

20. (currently amended) A medical communication system comprising:
an implantable medical device including a wireless receiver and a wireless transmitter; and

an external device including an external transmitter and an external receiver configured to communicate wirelessly with the implantable medical device via a plurality of communication channels each having a different frequency within a frequency band;

wherein the external device is configured to communicate wirelessly with the implantable medical device via a preset communication channel, and wherein the external device is configured to communicate wirelessly with the implantable medical device via an alternate communication channel selected according to an order of priority if the wireless receiver does not detect a suitable signal from the external transmitter using the preset communication channel;

wherein the external device is configured to communicate wirelessly with the implantable medical device in a present communication session on a last communication channel used in a last communication session immediately preceding the present communication session;
and

wherein the external device is configured to communicate wirelessly with the implantable medical device in the present communication session on a second-to-last communication channel used in a second-to-last communication session immediately preceding the last communication session, if the wireless receiver does not detect a suitable signal from the external transmitter using the last communication channel.

21.-23. (canceled)

24. (original) The medical communication system of claim 20 wherein the order of priority of communication channels selected is based on communication channels used in previous communication sessions in reverse chronological order.

25. (original) The medical communication system of claim 20 wherein the implantable medical device is configured to communicate with the external device at a primary predetermined time arranged in a previous communication with the external device.

26. (original) The medical communication system of claim 25 wherein the implantable medical device is configured to communicate with the external device at a secondary predetermined time arranged in the previous communication with the external device if the wireless receiver fails to detect wirelessly a suitable signal from the external transmitter at the primary predetermined time.

27. (original) The medical communication system of claim 25 wherein the wireless receiver is configured to scan for signals from the external transmitter at preset time periods if the wireless receiver fails to detect wirelessly a suitable signal from the external transmitter at the primary predetermined time.

28. (currently amended) A method for communication between an implantable medical device having a wireless receiver and a wireless transmitter and an external device having an external transmitter and an external receiver, the implantable medical device and the external device being configured to communicate wirelessly with one another via a plurality of communication channels each having a different frequency within a frequency band, the method comprising:

attempting initiation of a present communication session between the implantable medical device and the external device using a preset communication channel selected from the plurality of communication channels; and

switching to an alternate communication channel for the present communication session according to an order of priority if the wireless receiver of the implantable medical device does not detect a suitable signal from the external transmitter of the external device using the preset communication channel;

wherein attempting initiation of the present communication session comprises selecting as the preset communication channel a last communication channel used in a last communication session immediately preceding the present communication session; and

wherein switching to the alternate communication channel comprises selecting as the alternate communication channel a second-to-last communication channel used in a second-to-last communication session immediately preceding the last communication session.

29. (canceled)

30. (canceled)

31. (original) The method of claim 28 wherein the order of priority of communication channels selected is based on communication channels used in previous communication sessions in reverse chronological order.

32. (original) The method of claim 28 wherein the present communication session is initiated at a primary predetermined time arranged in a previous communication with the external device.

33. (original) The method of claim 32 wherein the present communication session is initiated at a secondary predetermined time arranged in the previous communication

with the external device if the wireless receiver fails to detect wirelessly a suitable signal from the external transmitter at the primary predetermined time.

34. (original) The method of claim 32 wherein initiating the present communication session comprises scanning with the wireless receiver for signals from the external transmitter at preset time periods if the wireless receiver fails to detect wirelessly a suitable signal from the external transmitter at the primary predetermined time.

35. (original) The method of claim 28 wherein switching to the alternate communication channel comprises selecting a communication channel having a lowest channel interference as the alternate communication channel based on measurement of channel interference conducted prior to attempting initiation of the present communication session.

36. (original) The method of claim 35 wherein the alternate communication is selected based on measurement of channel interference immediately prior to the present communication session.

37. (original) The method of claim 35 wherein the alternate communication is selected based on a statistical combination of multiple measurements of channel interference over time prior to the present communication session.

38. (original) The method of claim 28 wherein attempting initiation of the present communication session comprises selecting as the preset communication channel a last communication channel used in a last communication session immediately preceding the present communication session as long as the last communication channel provides a suitable signal which is below a monitoring threshold power level regardless of whether the last communication channel has a lower interference than the other communication channels.

39. (new) A medical communication system comprising:

an implantable medical device including a wireless receiver and a wireless transmitter; and

an external device including an external transmitter and an external receiver configured to communicate wirelessly with the implantable medical device via a plurality of communication channels each having a different frequency within a frequency band;

wherein the external device is configured to communicate wirelessly with the implantable medical device via a preset communication channel, and wherein the external device is configured to communicate wirelessly with the implantable medical device via an alternate communication channel selected according to an order of priority if the wireless receiver does not detect a suitable signal from the external transmitter using the preset communication channel; and

wherein the order of priority of communication channels selected is based on communication channels used in previous communication sessions in reverse chronological order.

40. (new) The medical communication system of claim 39 wherein the external device is configured to communicate wirelessly with the implantable medical device in a present communication session on a last communication channel used in a last communication session immediately preceding the present communication session.

41. (new) The medical communication system of claim 40 wherein the external device is configured to communicate wirelessly with the implantable medical device in the present communication session on the last communication channel immediately preceding the present communication session as long as the last communication channel provides a suitable signal which is below a monitoring threshold power level regardless of whether the last communication channel has a lower interference than the other communication channels.

42. (new) The medical communication system of claim 39 wherein the implantable medical device is configured to communicate with the external device at a primary predetermined time arranged in a previous communication with the external device.

43. (new) The medical communication system of claim 42 wherein the implantable medical device is configured to communicate with the external device at a secondary predetermined time arranged in the previous communication with the external device if the wireless receiver fails to detect wirelessly a suitable signal from the external transmitter at the primary predetermined time.

44. (new) The medical communication system of claim 42 wherein the wireless receiver is configured to scan for signals from the external transmitter at preset time periods if the wireless receiver fails to detect wirelessly a suitable signal from the external transmitter at the primary predetermined time.

45. (new) A method for communication between an implantable medical device having a wireless receiver and a wireless transmitter and an external device having an external transmitter and an external receiver, the implantable medical device and the external device being configured to communicate wirelessly with one another via a plurality of communication channels each having a different frequency within a frequency band, the method comprising:

attempting initiation of a present communication session between the implantable medical device and the external device using a preset communication channel selected from the plurality of communication channels; and

switching to an alternate communication channel for the present communication session according to an order of priority if the wireless receiver of the implantable medical device does not detect a suitable signal from the external transmitter of the external device using the preset communication channel;

wherein the order of priority of communication channels selected is based on communication channels used in previous communication sessions in reverse chronological order.

46. (new) The method of claim 45 wherein attempting initiation of the present communication session comprises selecting as the preset communication channel a last communication channel used in a last communication session immediately preceding the present communication session.

47. (new) The method of claim 45 wherein the present communication session is initiated at a primary predetermined time arranged in a previous communication with the external device.

48. (new) The method of claim 47 wherein the present communication session is initiated at a secondary predetermined time arranged in the previous communication with the external device if the wireless receiver fails to detect wirelessly a suitable signal from the external transmitter at the primary predetermined time.

49. (new) The method of claim 47 wherein initiating the present communication session comprises scanning with the wireless receiver for signals from the external transmitter at preset time periods if the wireless receiver fails to detect wirelessly a suitable signal from the external transmitter at the primary predetermined time.

50. (new) The method of claim 45 wherein switching to the alternate communication channel comprises selecting a communication channel having a lowest channel interference as the alternate communication channel based on measurement of channel interference conducted prior to attempting initiation of the present communication session.

51. (new) The method of claim 50 wherein the alternate communication is selected based on measurement of channel interference immediately prior to the present communication session.

52. (new) The method of claim 50 wherein the alternate communication is selected based on a statistical combination of multiple measurements of channel interference over time prior to the present communication session.

53. (new) The method of claim 45 wherein attempting initiation of the present communication session comprises selecting as the preset communication channel a last communication channel used in a last communication session immediately preceding the present communication session as long as the last communication channel provides a suitable signal which is below a monitoring threshold power level regardless of whether the last communication channel has a lower interference than the other communication channels.